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LETTERS

HYPERACUTE STROKE CARE

Improving acute stroke services in the Netherlands

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Monks and colleagues report on England's NHS business plan for hyperacute stroke care.[1] A similar debate on the reorganisation of acute stroke services is ongoing in the Netherlands.

In 2013, the Health Care Insurance Board (CVZ, currently named National Health Care Institute (ZiNL)) published a nationwide quality vision on emergency healthcare.[2] In 2010 a six month observational multicentre study in the north of the Netherlands showed a one in five thrombolysis rate in a centralised organisational model compared with an average one in seven rate in decentralised care administered in community hospitals—that is, a 50% increase.[3] Thrombolysis rates in community hospitals ranged from 9% to 23%.

Using a simulation model, we identified organisational barriers that might when tackled increase thrombolysis rates. Such experimentation shows the potential for improvement already possible through comparatively simple interventions.[1] We found that providing a point of care device to reduce time to laboratory analysis and introducing a "scoop and run" protocol for ambulance staff substantially improved rate and timing of thrombolysis delivery in our setting.[4] We also modelled the impact on thrombolysis rates and patient outcome in a decentralised care system.[5] Pre-hospital factors were the most promising for improving thrombolysis rates.

A lot of work remains to be done. Firstly, although simulation models might assist in providing an a priori assessment of improved service delivery, projected benefits have to be substantiated in clinical practice after implementation of suggested improvements. Secondly, the costs associated with reorganising services and staff in the case of centralisation have to be assessed. Again, simulation modelling might help in clarifying these issues—for example, by allowing linkage of costs to particular care services such as ambulance transportation, computed tomography scanning, and laboratory examination.

Competing interests: None declared.

Full response at: www.bmj.com/content/348/bmj.g3049/rr/697344.

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